

Application No. 10/811,197

AMENDMENTS TO THE DRAWINGS:

Please replace sheet 4 with the enclosed replacement sheet.

Attachment: Replacement Sheet

Remarks

The Office Action noted that the reference numeral 46 used in the detailed description was not shown in the drawing. Figure 4 has been amended to identify the reference numeral 46. This change to the drawing is not new matter, as the change merely brings the drawing into conformance with the written description.

The Office Action rejected claim 4 under the second paragraph of 35 U.S.C. 112. Applicants have amended claim 4 to correct a clerical error.

The Office Action also noted a reference to "the second insertion perimeter" among elements otherwise dealing with the fourth ink stick. Applicants have corrected claim 15 to specify that the element discussed is the "fourth insertion perimeter."

The Office Action noted that claims 3, 10-12, and 17-22 would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Applicants have amended claim 3 to incorporate the language of claim 1, from which claim 3 originally depended. Applicants have made a minor change to eliminate the reference to "a guide surface" in the ink stick body. This change renders the claim more readable, and applicants submit that the change does not effect the allowability of the subject matter of the claim.

Applicants have amended claim 10 to incorporate all of the limitations of claim 8, from which claim 10 originally depended. Claims 11 and 12 depend from claim 10. Applicants have rewritten claim 17 as new claim 26. New claim 26 includes all of the elements of prior claim 17, including the elements of claims 8, 14, and 15, from which prior claim 17 previously depended. Applicants rewrote the claim for improved readability.

Claim 18 has been amended merely to render the claim dependent upon rewritten claim 26, rather than claim 17.

Applicants therefore believe that claims 3, 10-12, 18-22, and 26 are in condition for allowance.

The Office Action rejected claims 1, 2, 5-9, 13-16 and 23-25 under 35 U.S.C. 103(a), citing U.S. Patent No. 5,861,903 to Crawford et al. in view of U.S. Patent No. 5,442,387 to Loofbourow et al.

With respect to claim 1, the Office Action asserts that the Loofbourow et al. reference discloses an elongate shaped guide rail extending in a feed channel, specifying reference element 39(b), and a nonplanar shaped guide element shaped to interact with the elongate shaped guide rail in the solid ink feed system for guiding the ink stick along the guide rail. The Loofbourow et al. reference describes the elements 39(a)-(d) as apertures in an aperture plate 38. Each aperture has a different configuration to accommodate ink sticks of only one configuration. That arrangement is described as assuring that appropriate ink sticks are insertable only in the corresponding preload chambers, and prevents an operator from inadvertently inserting ink sticks into the wrong preload chamber. See column 6, lines 43-57. From Figure 3 of the reference, it appears that the aperture plate 38 has very limited dimension in the direction in which the ink sticks are inserted into the ink load mechanism. The description and illustration of the preload chambers do not indicate any extension of any of the shapes of the apertures 39(a)-(d) through the ink preload chambers 32(a)-(d). Thus, the apertures 39(a)-(d) do not form elongate shaped guide rails, and the shapes of the ink stick perimeters are not shaped for guiding the ink stick along a guide rail.

Furthermore, the person of ordinary skill in the art would not be motivated to combine the teachings of the Crawford et al. reference and the

Loofbourow et al. reference in the manner suggested by the Examiner. Because the Loofbourow et al. reference describes the apertures 39(a)-(d) as providing a mechanism for preventing an operator from inadvertently inserting ink sticks into the wrong preload chamber, and that function is performed in the Crawford et al. system by the receptacles (or openings) 24A-D, the person of ordinary skill in the art would not be lead to convert the shapes of the ink sticks and their corresponding openings of the Loofbourow et al. device into the completely different function of guiding the ink stick along an elongate guide rail within the solid ink feed system. Thus, the references do not suggest a combination yielding the claimed invention.

With respect to independent claim 8, the Office Action identifies the apertures 39(a)-(d) as forming elongate shaped guide rails extending in a feed direction, and the shape of the corresponding ink sticks as forming nonplanar shaped guide elements shaped to interact with the guide rail for guiding the ink stick in the first feed direction along the guide rail. The Loofbourow et al. reference describes the apertures 39(a)-(d) as extending through an aperture plate 38, with the aperture configurations mutually exclusive so that appropriate ink sticks are insertable only in the corresponding preload chambers, to prevent an operator from inadvertently inserting ink sticks into the wrong preload chamber. See column 6, lines 43-57. The person of skill in the art would see this exclusionary function as the same function provided by the receptacles or openings 24A-D of the Crawford et al. reference, and would not convert the shapes of the ink sticks of the Loofbourow et al. reference to a completely different function of guiding the ink sticks along a feed direction.

Furthermore, Figure 3 of the Loofbourow et al. reference suggests that the aperture plate 38, and its corresponding apertures 39(a)-(d) have a limited dimension in the direction of the ink sticks. The other drawings of the

preload chambers 32(a)-(b) do not show any continuation of any shaped guide rail through the preload chambers. Thus, the references do not suggest elongate shaped guide rails extending in a feed direction, or nonplanar ink stick guide elements shaped to interact with the guide rail for guiding the ink stick in the first feed direction along the guide rail.

With respect to the method defined in independent claim 23, the Office Action identifies engaging a shaped ink stick guide element with a shaped guide rail with element 12 of Figure 3 of the Loofbourow et al. reference and element 39(a) of Figure 4 of the Loofbourow et al. reference. Loofbourow et al. describe that an aperture plate 38 is mounted at an upper end of the ink preload assembly. Aperture plate 38 is provided with a series of apertures 39(a)-(d), each having a different configuration so that appropriate ink sticks are insertable only in the corresponding preload chambers, preventing an operator from inadvertently inserting ink sticks into the wrong preload chamber. See column 6, lines 43-57. Loofbourow et al. do not suggest continuing the shape of the apertures 39(a)-(d) into or through the preload chambers 32(a)-(d). From Figure 3 of the reference, it appears that the aperture plate 38 has a limited dimension in the ink stick insertion direction. Because the apertures 39(a)-(d) are described as performing an exclusionary function, the reference does not teach or suggest that the apertures be converted to a completely different function of guiding a shaped ink stick in a feed direction. The person of skill in the art reading Crawford et al. and Loofbourow et al. would see that the aperture plate 38, with its apertures 39(a)-(d), performs the exclusionary function that the receptacles or openings 24A-D of Crawford et al. perform, and would not be led to convert the apertures of Loofbourow et al. to the completely different function of guiding the ink sticks in a feed direction that is different from the ink stick

insertion direction. Therefore, the combination of references does not suggest the claimed invention.

Applicants therefore respectfully submit that the present invention as defined in the pending claims is patentably distinct from the references identified in the Office Action. Applicants therefore respectfully request allowance of claims 1-4, 8-16, and 18-26.

If the Examiner considers personal contact helpful to dispose of this case, call David J. Arthur, at Telephone Number (585) 423-9215, Rochester, New York.

Respectfully submitted,

A handwritten signature in cursive script, appearing to read "David J. Arthur", is written over a horizontal line.

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